



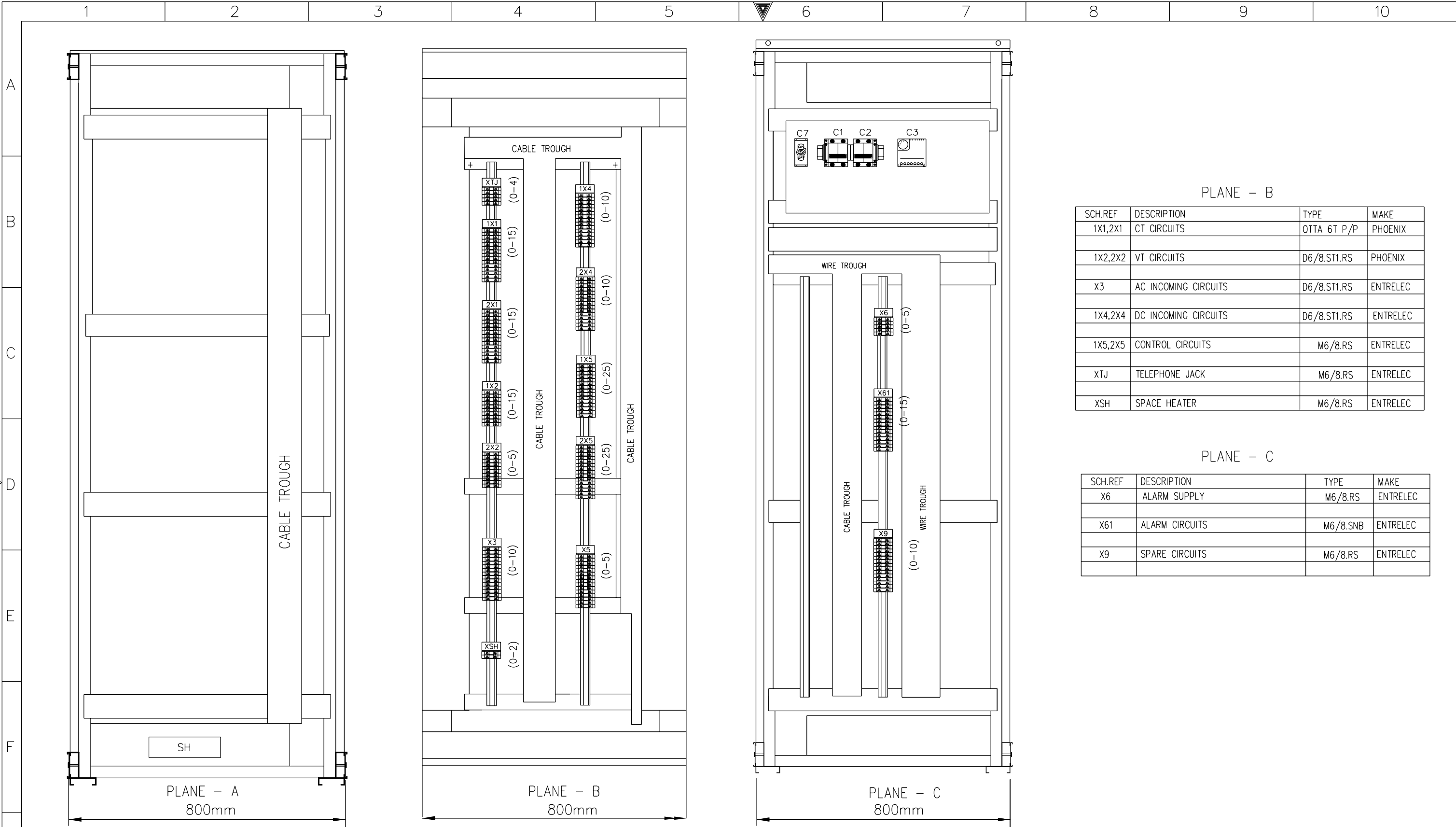


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A			POWER SYSTEMS NETWORK MANAGEMENT PROTECTION AND SUBSTATION AUTOMATION SYSTEMS WBS NO: S-13656					ABB AUTOMATION COMPANY LTD. 414, AL-KHARJ ROAD SECOND INDUSTRIAL CITY RIYADH-11383 K.S.A																																																									
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	TITLE : Assembly Drawing – +CBP3 [CAPACITOR BANK3]																																																																
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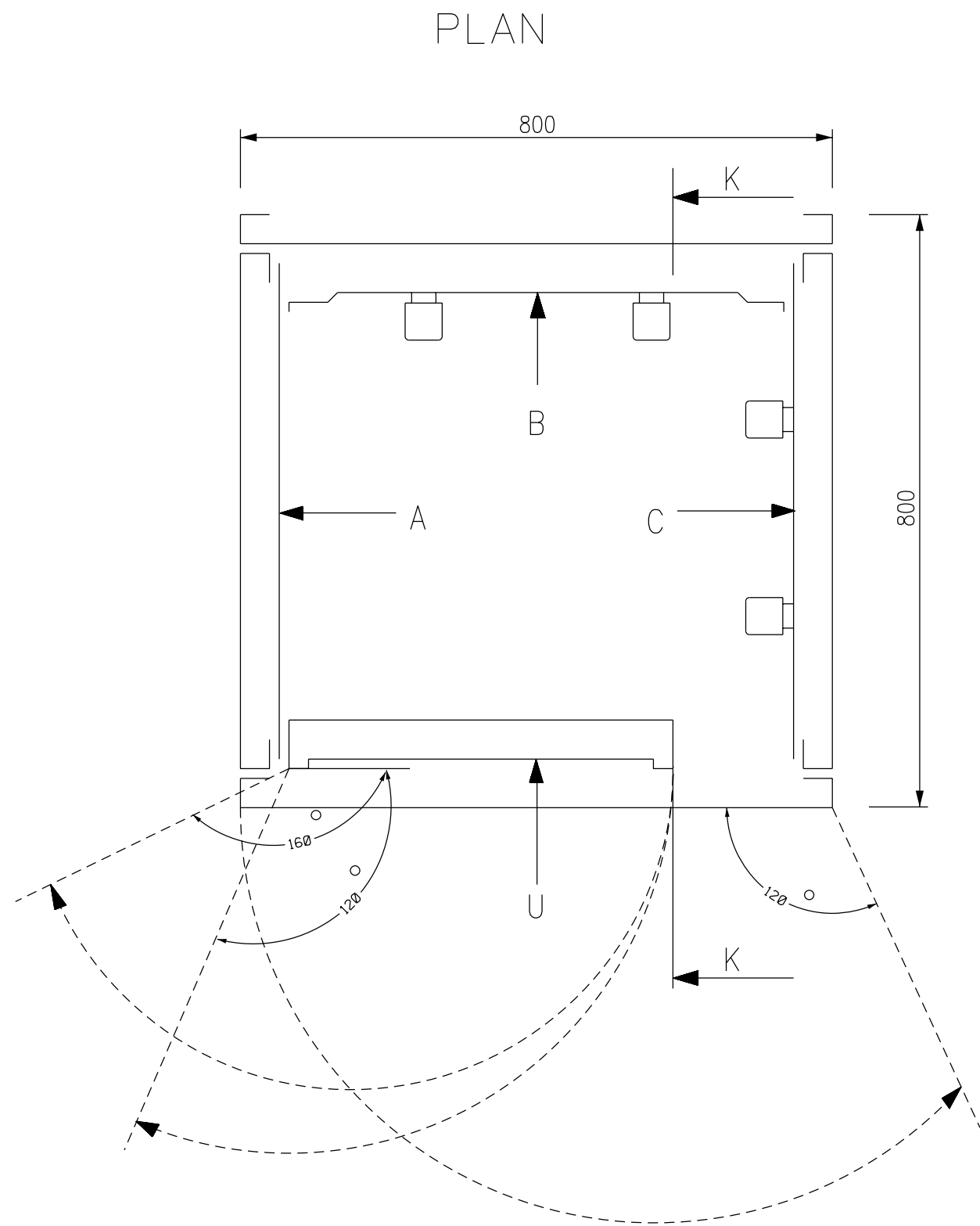
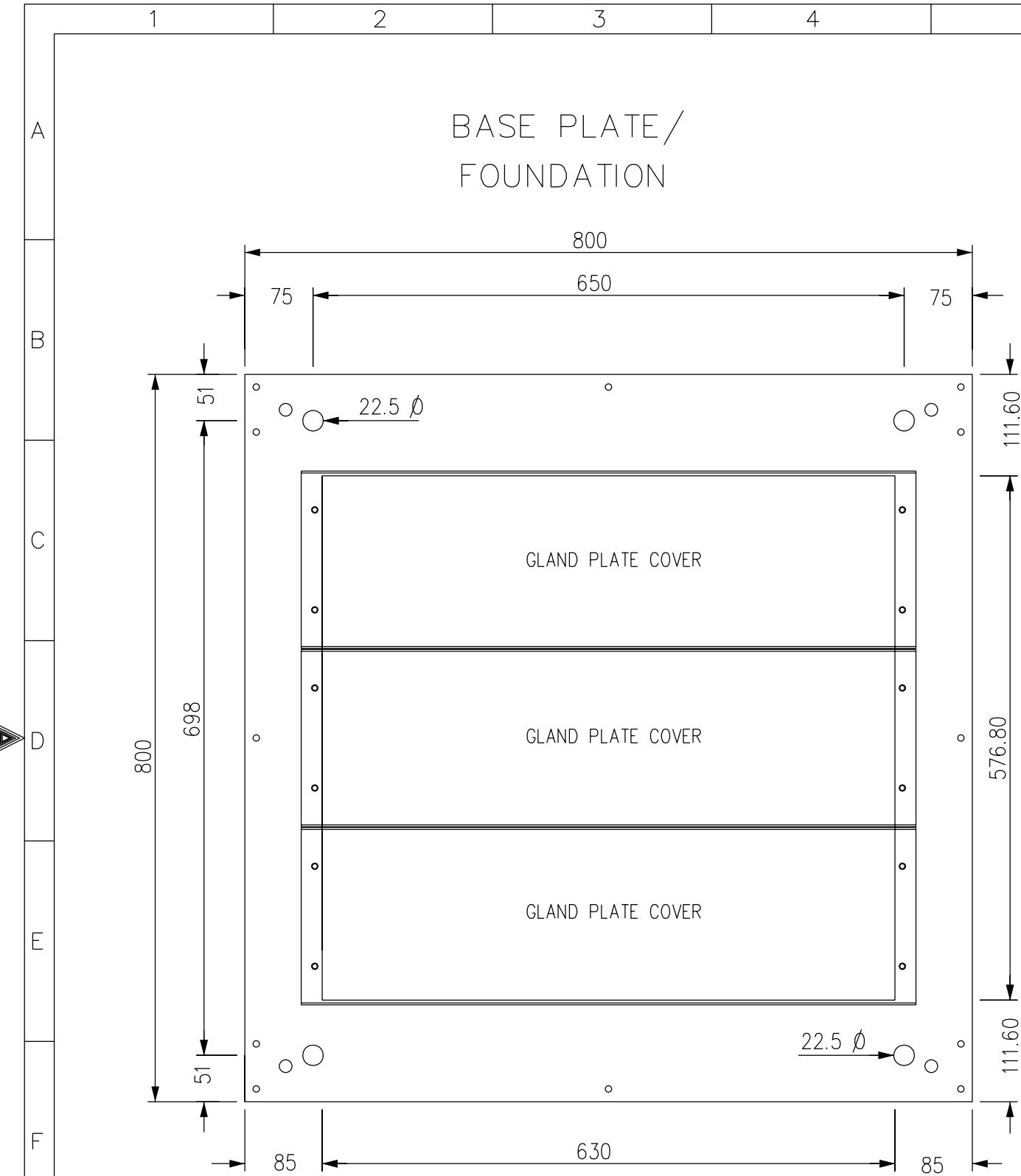
PLANE – B

SCH.REF	DESCRIPTION	TYPE	MAKE
1X1,2X1	CT CIRCUITS	OTTA 6T P/P	PHOENIX
1X2,2X2	VT CIRCUITS	D6/8.ST1.RS	PHOENIX
X3	AC INCOMING CIRCUITS	D6/8.ST1.RS	ENTRELEC
1X4,2X4	DC INCOMING CIRCUITS	D6/8.ST1.RS	ENTRELEC
1X5,2X5	CONTROL CIRCUITS	M6/8.RS	ENTRELEC
XTJ	TELEPHONE JACK	M6/8.RS	ENTRELEC
XSH	SPACE HEATER	M6/8.RS	ENTRELEC

PLANE – C

SCH.REF	DESCRIPTION	TYPE	MAKE
X6	ALARM SUPPLY	M6/8.RS	ENTRELEC
X61	ALARM CIRCUITS	M6/8.SNB	ENTRELEC
X9	SPARE CIRCUITS	M6/8.RS	ENTRELEC

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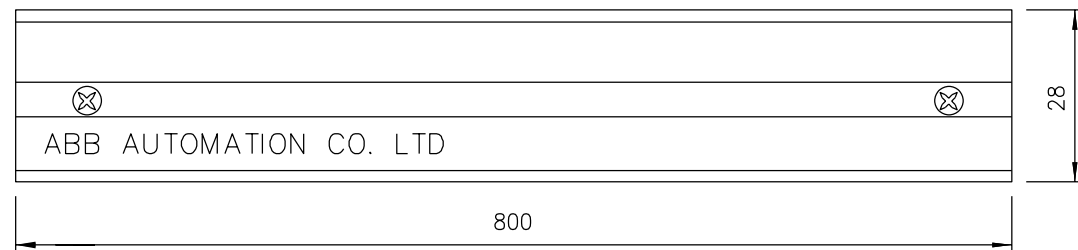
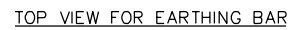
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REV. NO.	DATE	DESCRIPTION

DRAWN BY RIZ	CHECKED BY KVR
DATE STARTED 24.01.2013	DATE COMPLETED
OPRG. DEPT. CTPD	ENG. DEPT. AUT-PSAC

ASSEMBLY DRAWING
13.8kV CAPACITOR BANK-3 PROT. PANEL
S/S 8709-132/13.8KV IN AL-KHARJ CITY
RIYADH SAUDI ARABIA

الشركة الوطنية لنقل الكهرباء National Grid sa				
INDEX	PLANT NO.	DRAWING NUMBER	SHEET NO.	REV. NO.
P	C421	CD-322955	SHT G03	CONT. G04
			01	







**ABB** ABB Automation Co.Ltd.

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PROJECT	:	National Grid SA S/S 8709
ORDER REFERENCE	:	2875 RF S13656
YEAR OF MANUFACTURE:		2013
PANEL NO.	:	+CBP3
DRAWING NO.	:	S13656-CD-323956

MADE IN THE KINGDOM OF SAUDI ARABIA

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P	C421	CD-322955	SHT G04	CONT. L00	01

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B	SR. NO.	LOCATION REF.	SCH REF.	D E S C R I P T I O N		SHT NO.	QTY.	TYPE	MAKE	ORDERING INFORMATION
	3	U17.5001	TS-1	TEST SWITCH FOR GROUP-1 PROTECTION		213	1	RXTP24	ABB	RK 926 315-AG
	4	U17.5002	TS-2	TEST SWITCH FOR GROUP-2 PROTECTION		214	1	RXTP24	ABB	RK 926 315-AK
	5	U23.5001	86C-1	GROUP-1 LOCKOUT RELAY		218	1	MVAJ105	ALSTOM	MVAJ105RA0802A
				AUX. VOLTAGE : 125V DC						
				CONTACTS : 8NO + 2NC						
				FLAG:STANDARD HAND RESET						
				CONTACT MECHANISM:HAND & ELECTRICAL RESET						
C	6	U23.5002	94-1	TRIP RELAY		218	1	MVAJ101	ALSTOM	MVAJ101RA0800A
				AUX. VOLTAGE : 125V DC						
				CONTACTS : 10NO						
	7	U23.5003	86BF	BF LOCKOUT RELAY		220	1	MVAJ105	ALSTOM	MVAJ105RA0802A
				AUX. VOLTAGE : 125V DC/TRIPPING RELAY-HIGH BURDEN						
				CONTACTS : 8NO + 2NC						
				FLAG:STANDARD HAND RESET						
				CONTACT MECHANISM:HAND & ELECTRICAL RESET						
D	8	U23.5004	86C-2	GROUP-2 LOCKOUT RELAY		220	1	MVAJ105	ALSTOM	MVAJ105RA0802A
				AUX. VOLTAGE : 125V DC						
				CONTACTS : 8NO + 2NC						
				FLAG:STANDARD HAND RESET						
				CONTACT MECHANISM:HAND & ELECTRICAL RESET						
	9	U23.5005	94-2	TRIP RELAY		220	1	MVAJ101	ALSTOM	MVAJ101RA0800A
				AUX. VOLTAGE : 125V DC						
				CONTACTS : 10NO						
E	10	U21.5001	PB11	PUSH BUTTON FOR RESETTING 86C-1 LOCKOUT RELAY		218	1	MP1-10B	ABB	1SFA 611 100 R1006
				BUTTON COLOUR ;BLACK:CONTACT DATA:1NO+1NC				MCBH-20		1SFA 611 605 R1102
	11	U21.5002	PB22	PUSH BUTTON FOR RESETTING 86BF LOCKOUT RELAY		220	1	MP1-10B	ABB	1SFA 611 100 R1006
				BUTTON COLOUR ;BLACK:CONTACT DATA:1NO+1NC				MCBH-20		1SFA 611 605 R1102
	12	U21.5003	PB21	PUSH BUTTON FOR RESETTING 86C-2 LOCKOUT RELAY		220	1	MP1-10B	ABB	1SFA 611 100 R1006
				BUTTON COLOUR ;BLACK:CONTACT DATA:1NO+1NC			1	MCBH-20		1SFA 611 605 R1102
	13	U27.301	74R1	DC SUPERVISION RELAY (REVERSE FLAG)		218		RXSF1	ABB	RK 271 019-AN
			SPARE	AUX. VOLTAGE : 110-125V DC						
F				CONTACTS : 1NO + 2NC PER COIL						
				FLAG : SELF RESET						
G	AS-BUILT BY _____ DATE _____		CONTRACT NO. 11131113/00		JOB ORDER NO. S-13656		LIST OF APPARATUS		الشركة الوطنية لنقل الكهرباء National Grid sa	
	01	14 08	FACTORY AS BUILT		DRAWN BY RIZ CHECKED BY KVR		13.8kV CAPACITOR BANK-3 PROT. PANEL			
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	REV. NO.	DATE	DESCRIPTION		OPRG. DEPT. CTPD ENG. DEPT. AUT-PSAC		RIYADH SAUDI ARABIA			

INDEX

PLANT NO.

DRAWING NUMBER

SHEET NO.

REV. NO.

P

C421

CD-322955

L02

L03

01

DMS

VECTOR

NG/D2-D (2012/01)

NGD200

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		24		1X1	BOLT CONNECTING TERMINAL BLOCK DISCONNECTABLE FOR CT CIRCUIT		605	15	OTTA6T-P/P	PHOENIX	0790462			
				2X1			605	15						
		25		1X2	SPRING LOADED TERMINAL BLOCK DISCONNECTABLE FOR PT SUPPLY		605	10	D6/8.ST1.RS	ENTRELEC	1SNA 115 831 R0400			
				2X2			605	5						
B		26		X3	SPRING LOADED TERMINAL BLOCKS FOR AC SUPPLY		605	10	D6/8.ST1.RS	ENTRELEC	1SNA 115 831 R0400			
		27		1X4	SPRING LOADED TERMINAL BLOCK FOR DC CIRCUIT		605	10	D6/8.ST1.RS	ENTRELEC	1SNA 115 831 R0400			
				2X4			605	10						
		28		1X5	SPRING LOADED TERMINAL BLOCK FOR CONTROL CIRCUIT		605	25	M6/8.RS	ENTRELEC	1SNA 115 685 R1200			
				2X5			605	25						
		29		X5	SPRING LOADED TERMINAL BLOCK FOR CONTROL CIRCUIT		605	5	M6/8.RS	ENTRELEC	1SNA 115 685 R1200			
		30		X61	SRING LOADED TERMINAL BLOCK FOR STN.-COM ALARM PANEL		604	10	M6/8 SNB	ENTRELEC	1SNA 115 688 R2500			
C		31		XSH	SPRING LOADED TERMINAL BLOCK FOR SPACE HEATER		605	2	M6/8.RS	ENTRELEC	1SNA 115 688 R2500			
		32		XTJ	SPRING LOADED TERMINAL BLOCK FOR TELEPHONE JACK		605	4	M6/8.RS	ENTRELEC	ISNA 115 685 R1200			
		33		X9	SPRING LOADED TERMINAL BLOCK FOR SPARE CONTACT		605	10	M6/8.RS	ENTRELEC	ISNA 115 685 R1200			
		34		X6	SPRING LOADED TERMINAL FOR ALARM		605	5	M6/8.RS	ENTRELEC	1SNA 115 688 R2500			
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	REV. NO.	DATE	DESCRIPTION		OPRG. DEPT. <u>CTPD</u> ENG. DEPT. <u>AUT-PSAC</u>																																																																					



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A			POWER SYSTEMS NETWORK MANAGEMENT PROTECTION AND SUBSTATION AUTOMATION SYSTEMS WBS NO: S-13656					ABB AUTOMATION COMPANY LTD. 414, AL-KHARJ ROAD SECOND INDUSTRIAL CITY RIYADH-11383 K.S.A																																																					
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C																																																													
D	CONTRACTOR : ABB Contracting Company																																																												
	CLIENT : National Gridsa																																																												
	PROJECT : CONSTRUCTION OF NEW 132/13.8kV SS 8709 IN AL-KHARJ CITY																																																												
	SUBSTATION : S/S 8709																																																												
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SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	FUSE / LINK		WATTMETER		ELEMENT WITH NEGATED INHIBITING INPUT
	FUSE WITH THE SUPPLY SIDE INDICATED		VARMETER		ELEMENT WITH INPUT WHICH DOES NOT CARRY ANY LOGIC INFORMATION
	SINGLE-PHASE TRANSFORMER WITH TWO SEPARATE WINDINGS (TWO ALTERNATIVE FORMS)		POWER FACTOR METER		ELEMENT WITH POSTPONED OUTPUT
	SINGLE-PHASE TRANSFORMER WITH THREE SEPARATE WINDINGS (TWO ALTERNATIVE FORMS)		POSITION INDICATOR		AND-ELEMENT WITH TWO INPUTS
	SINGLE-PHASE TRANSFORMER WITH FERRO MAGNETIC CORE		SYNCHROSCOPE		OR-ELEMENT WITH TWO INPUTS
	SINGLE-PHASE VOLTAGE TRANSFORMER (MULTI-LINE AND SINGLE-LINE REPRESENTATION)		RECORDING VOLTMETER		LOGIC THRESHOLD ELEMENT WITH FOUR INPUTS AND THRESHOLD VALUE 2
	SINGLE-PHASE VOLTAGE TRANSFORMER WITH TWO SECONDARY WINDINGS (MULTI-LINE AND SINGLE-LINE REPRESENTATION)		RECORDING WATTMETER		ELEMENT WITH THREE INPUTS FOR "2 AND ONLY 2"
	CURRENT TRANSFORMER (MULTI-LINE AND SINGLE-LINE REPRESENTATION)		HOUR METER		EXCLUSIVE OR-ELEMENT WITH THREE INPUTS
	CURRENT TRANSFORMER WITH TWO CORES (MULTI-LINE AND SINGLE-LINE REPRESENTATION)		WATT-HOUR METER		LOGIC IDENTITY ELEMENT WITH THREE INPUTS
	CURRENT TRANSFORMER WITH TWO SECONDARY WINDINGS ON ONE CORE (MULTI-LINE AND SINGLE-LINE REPRESENTATION)		WATT-HOUR METER FOR ENERGY FROM A BUSBAR SYSTEM		MAJORITY ELEMENT WITH THREE INPUTS
	FILTER		ELEMENT WITH STATIC INPUT		NEGATOR
	HIGH-PASS FILTER		ELEMENT WITH STATIC NEGATED INPUT		NAND ELEMENT WITH TWO INPUTS
	BAND-PASS FILTER		ELEMENT WITH STATIC NEGATED OUTPUT		NOR ELEMENT WITH TWO INPUTS
	VOLTMETER		ELEMENT WITH DYNAMIC INPUT		BISTABLE ELEMENT
	AMMETER		ELEMENT WITH DYNAMIC NEGATED INPUT		
			ELEMENT WITH INHIBITING INPUT		

AS-BUILT BY _____ DATE _____		CONTRACT NO. 11131113/00	JOB ORDER NO. S-13656	GRAPHICAL SYMBOLS FOR DIAGRAMS		الشركة الوطنية لنقل الكهرباء				
				13.8kV CAPACITOR BANK-3 PROT.PANEL		National Grid sa				
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REV. NO.	DATE	DESCRIPTION		OPRG. DEPT.	ENG. DEPT.					
				CTPD	AUT-PSAC					



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LEGENDS

±R1  
±R2  
±R3  
±IT  
FL  
BB RS±  
BB CBF±/CBF±

DC SUPPLY – MAIN PROTECTION  
DC SUPPLY – SECONDARY PROTECTION  
DC SUPPLY – BACK UP PROTECTION  
DC SUPPLY – INTER TRIP  
DC SUPPLY – FLASHING CIRCUIT  
DC SUPPLY – BUS BAR – PROTECTION RESET  
DC SUPPLY – CBF PROTECTION

R  
CR  
ECC  
LOCAL  
REMOTE

RESET BUS – ALARM SYSTEM  
CONTROL ROOM  
ENERGY CONTROL CENTRE  
THE LOCATION OF CONTROLLED DEVICE  
ANY OTHER LOCATION NOT LOCAL

ON  
OFF  
A  
T  
S  
CS  
CT  
LS  
LT  
LC  
LO  
RO

CB NORMALLY OPEN AUXILIARY CONTACT  
CB NORMALLY CLOSED AUXILIARY CONTACT  
COMMON  
TEST POSITION  
SERVICE POSITION  
CLOSE IN SERVICE POSITION  
CLOSE IN TEST POSITION  
LOCAL SERVICE  
LOCAL TEST  
LOCAL CLOSE  
LOCAL OPEN  
REMOTE OPEN

NOTES

LABELS

LUGS

FERULLING

INDEX		PLANT NO.	DRAWING NUMBER	SHEET NO.		REV. NO.
P		C421	CD-322956	SHT	CONT.	01
				013	014	

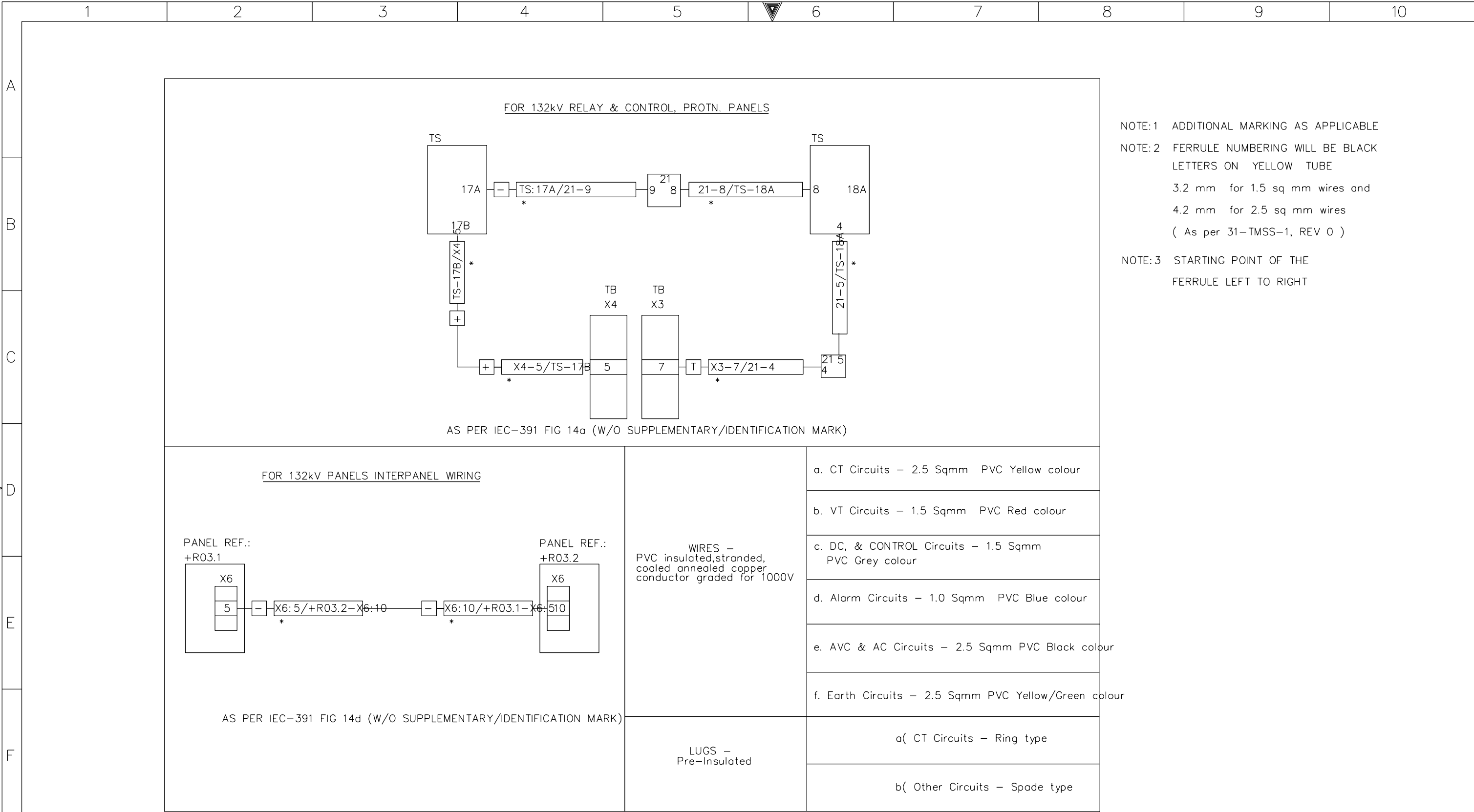
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											CD-322916	132KV 8020 UGF RELAY PANEL -1	+R02.1																																																																																					
												132KV 8020 UGF RELAY PANEL -2	+R02.2																																																																																					
											CD-322919	132KV 8710 UGF RELAY PANEL -1	+R03.1																																																																																					
												132KV 8710 UGF RELAY PANEL -2	+R03.2																																																																																					
											CD-322925	132KV SPARE-2 UGF RELAY PANEL -1	+R06.1																																																																																					
												132KV SPARE-2 UGF RELAY PANEL -2	+R06.2																																																																																					
											CD-323012	132KV FOIP PANEL	+FOIP																																																																																					
											CD-322946	132kV BUS COUPLER-A	+R130																																																																																					
	CD-322948	132kV BUS COUPLER-B	+R230																																																																																															
	CD-322950	132kV BUS SECTION	+R120																																																																																															
CD-322991	132kV BUSBAR PROTECTION MAIN-1 CENTRAL UNIT PANEL	+BB1-1																																																																																																
CD-322993	132kV BUSBAR PROTECTION MAIN-1 BAY UNIT PANEL	+BB1-2																																																																																																
CD-322995	132kV BUSBAR PROTECTION MAIN-1 BAY UNIT PANEL	+BB1-3																																																																																																
CD-322997	132kV BUSBAR PROTECTION MAIN-1 BAY UNIT PANEL	+BB1-4																																																																																																
CD-322999	132kV BUSBAR PROTECTION MAIN-1 BAY UNIT PANEL	+BB1-5																																																																																																
CD-323001	132kV BUSBAR PROTECTION MAIN-2 CENTRAL UNIT PANEL	+BB2-1																																																																																																
CD-323003	132kV BUSBAR PROTECTION MAIN-2 BAY UNIT PANEL	+BB2-2																																																																																																
CD-323005	132kV BUSBAR PROTECTION MAIN-2 BAY UNIT PANEL	+BB2-3																																																																																																
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CD-323009	132kV BUSBAR PROTECTION MAIN-2 BAY UNIT PANEL	+BB2-5																																																																																																
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	01	14 08	FACTORY AS BUILT		DATE STARTED 24.01.2013 DATE COMPLETED		S/S 8709-132/13.8KV IN AL-KHARJ CITY		P	C421	CD-322956		SHT	CONT.	01																																																																																			
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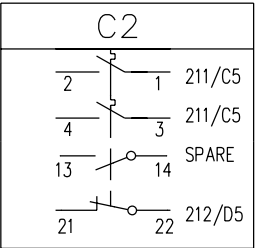
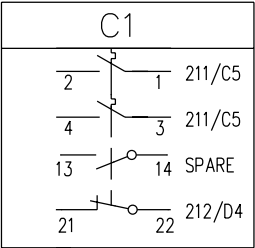
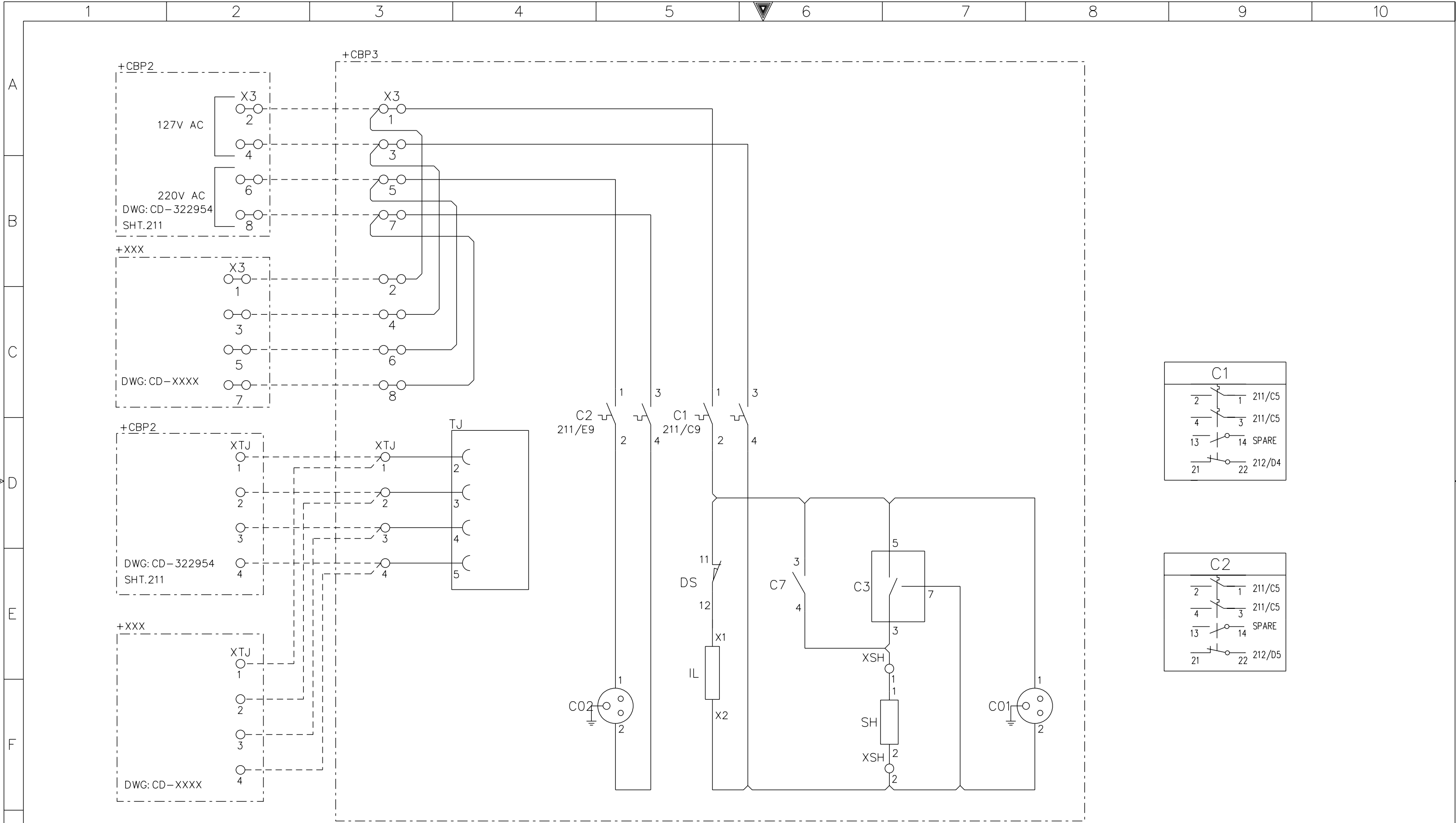
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AS-BUILT BY _____ DATE _____			CONTRACT NO. 11131113/00		JOB ORDER NO. S-13656		DRAWING REFERENCES			<div>الشركة الوطنية لنقل الكهرباء</div> <div>نقل الكهرباء</div> <div>National Grid sa</div>																																																																
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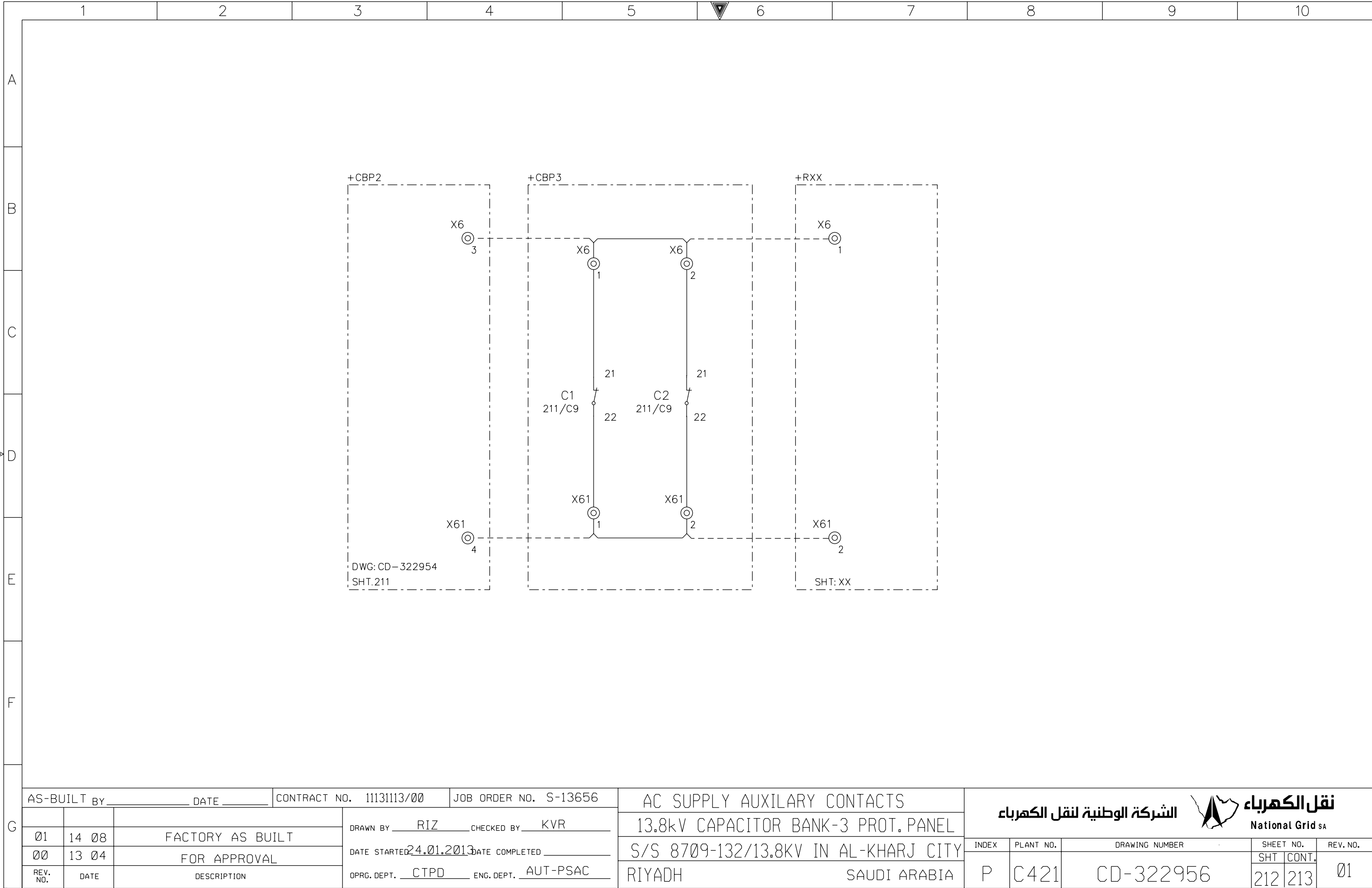


PROTECTION & SUBSTATION  
AUTOMATION

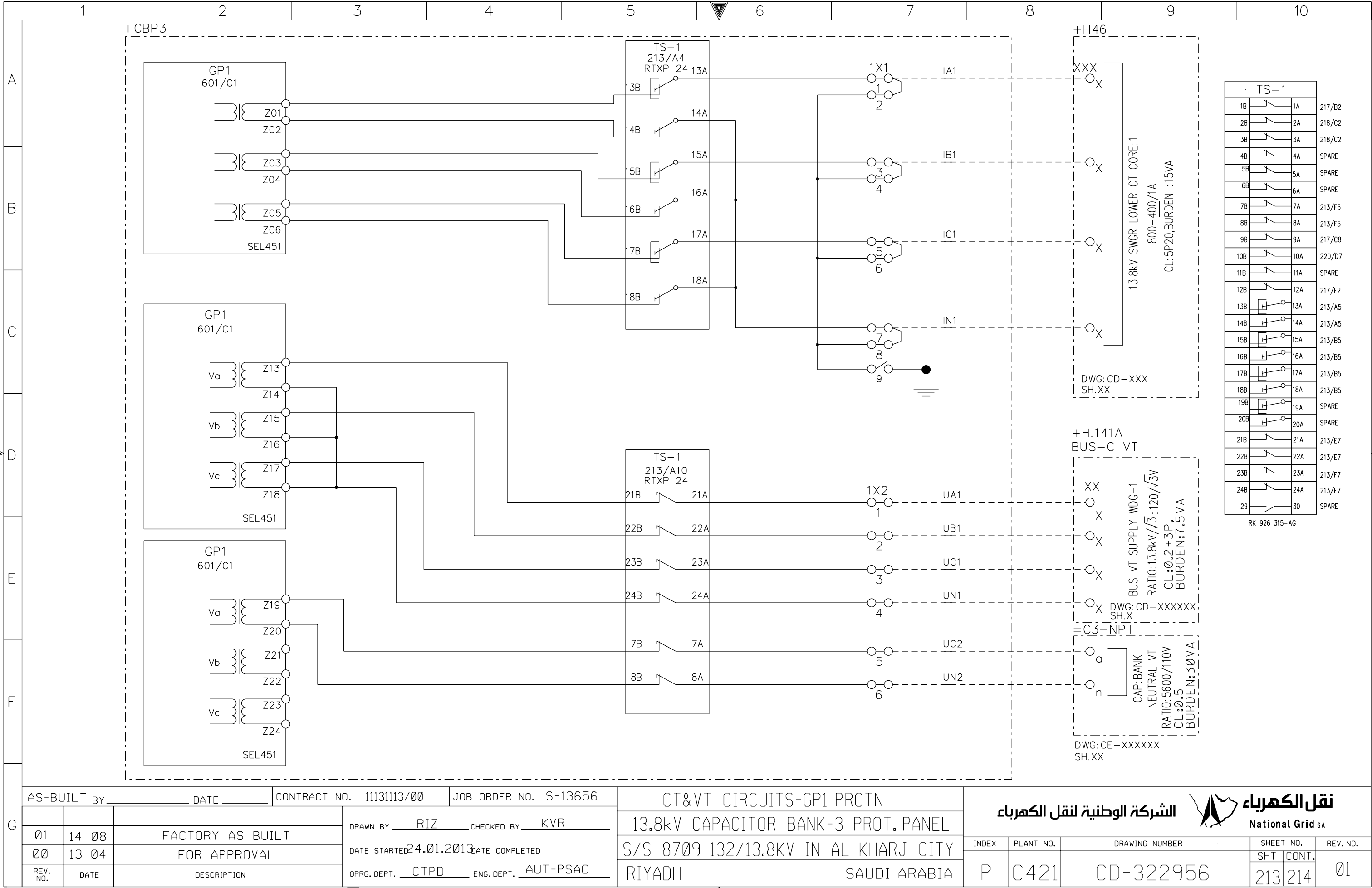
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G	AS-BUILT BY _____ DATE _____		CONTRACT NO. 11131113/00		JOB ORDER NO. S-13656		AC SUPPLY FOR ILLUMINATION & POWER SOCKET		<div>الشركة الوطنية لنقل الكهرباء</div> <div>نقل الكهرباء</div> <div>National Grid SA</div>					
							13.8kV CAPACITOR BANK-3 PROT.PANEL							
	01	14 08	FACTORY AS BUILT		DRAWN BY RIZ CHECKED BY KVR		S/S 8709-132/13.8KV IN AL-KHARJ CITY							
	00	13 04	FOR APPROVAL		DATE STARTED 24.01.2013 DATE COMPLETED _____		RIYADH SAUDI ARABIA							
	REV. NO.	DATE	DESCRIPTION		OPRG. DEPT. CTPD ENG. DEPT. AUT-PSAC				INDEX	PLANT NO.	DRAWING NUMBER		SHEET NO.	
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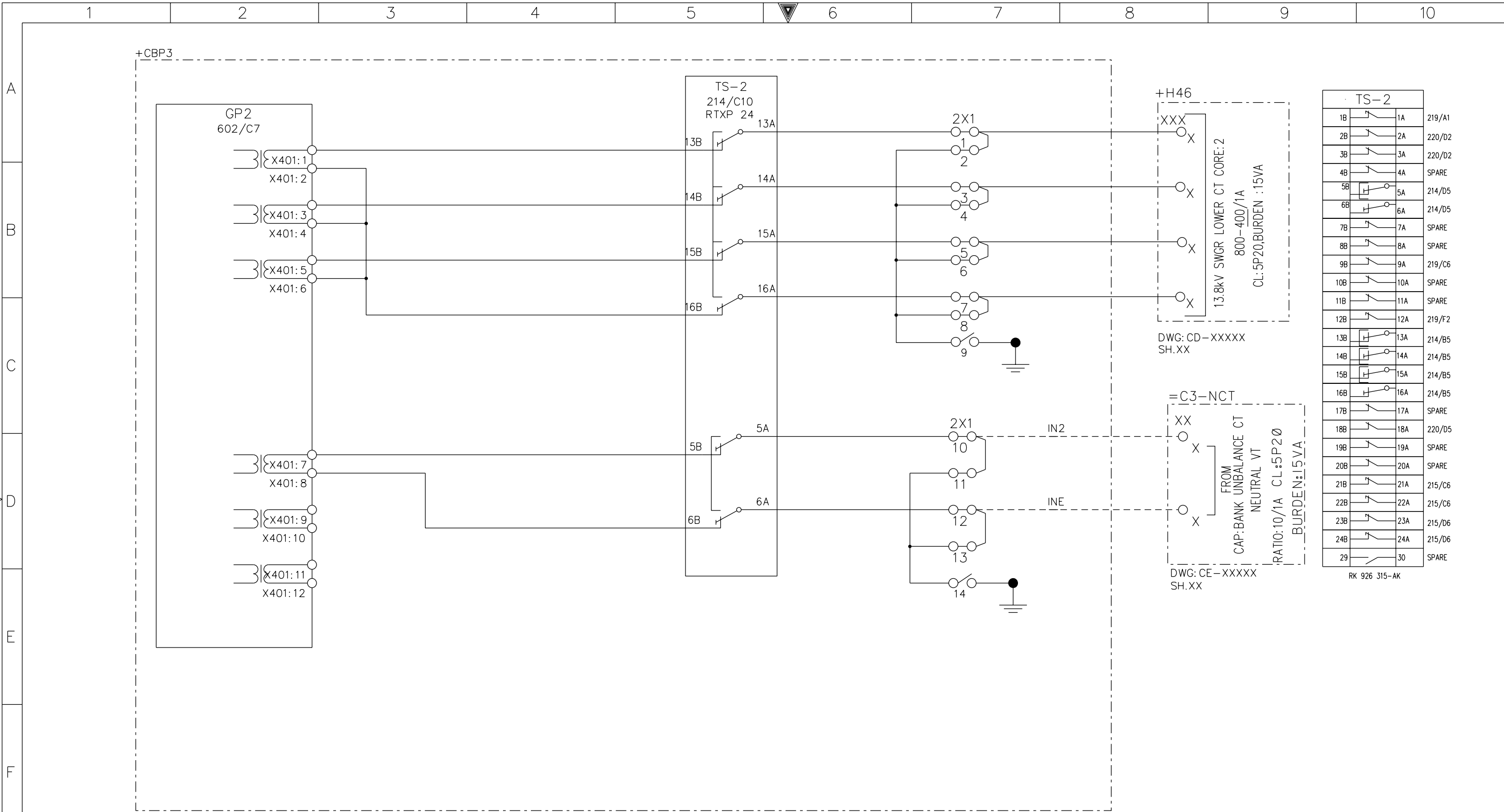


AS-BUILT BY \_\_\_\_\_ DATE \_\_\_\_\_ CONTRACT NO. 11131113/00 JOB ORDER NO. S-13656

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	00	13 04	FOR APPROVAL	DATE STARTED 24.01.2013 DATE COMPLETED _____
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CT&VT CIRCUITS-GP1 PROT N  
13.8kV CAPACITOR BANK-3 PROT. PANEL  
S/S 8709-132/13.8KV IN AL-KHARJ CITY  
RIYADH SAUDI ARABIA

الشركة الوطنية لنقل الكهرباء National Grid sa				
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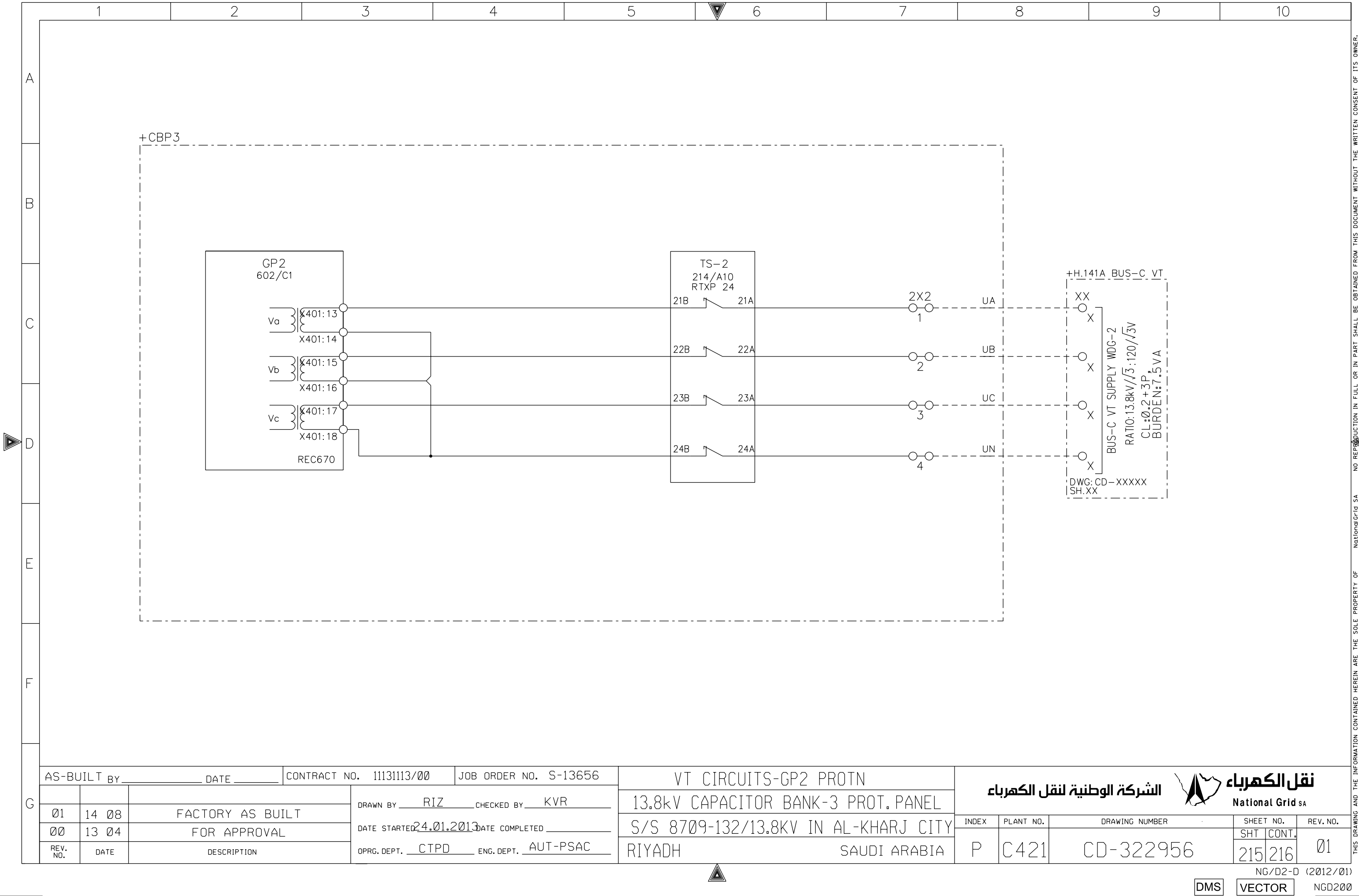


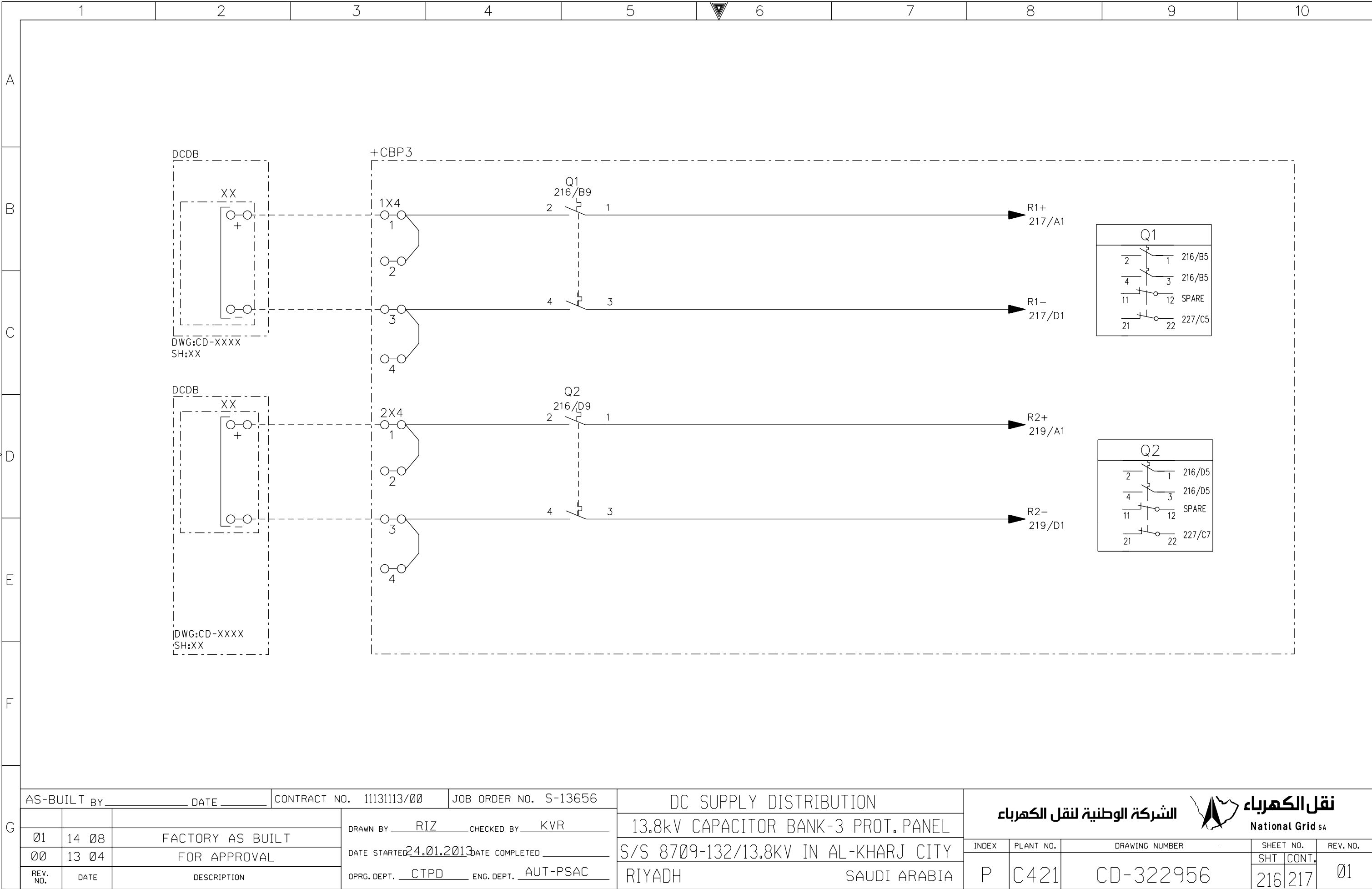
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2B	2A	220/D2
3B	3A	220/D2
4B	4A	SPARE
5B	5A	214/D5
6B	6A	214/D5
7B	7A	SPARE
8B	8A	SPARE
9B	9A	219/C6
10B	10A	SPARE
11B	11A	SPARE
12B	12A	219/F2
13B	13A	214/B5
14B	14A	214/B5
15B	15A	214/B5
16B	16A	214/B5
17B	17A	SPARE
18B	18A	220/D5
19B	19A	SPARE
20B	20A	SPARE
21B	21A	215/C6
22B	22A	215/C6
23B	23A	215/D6
24B	24A	215/D6
29	30	SPARE

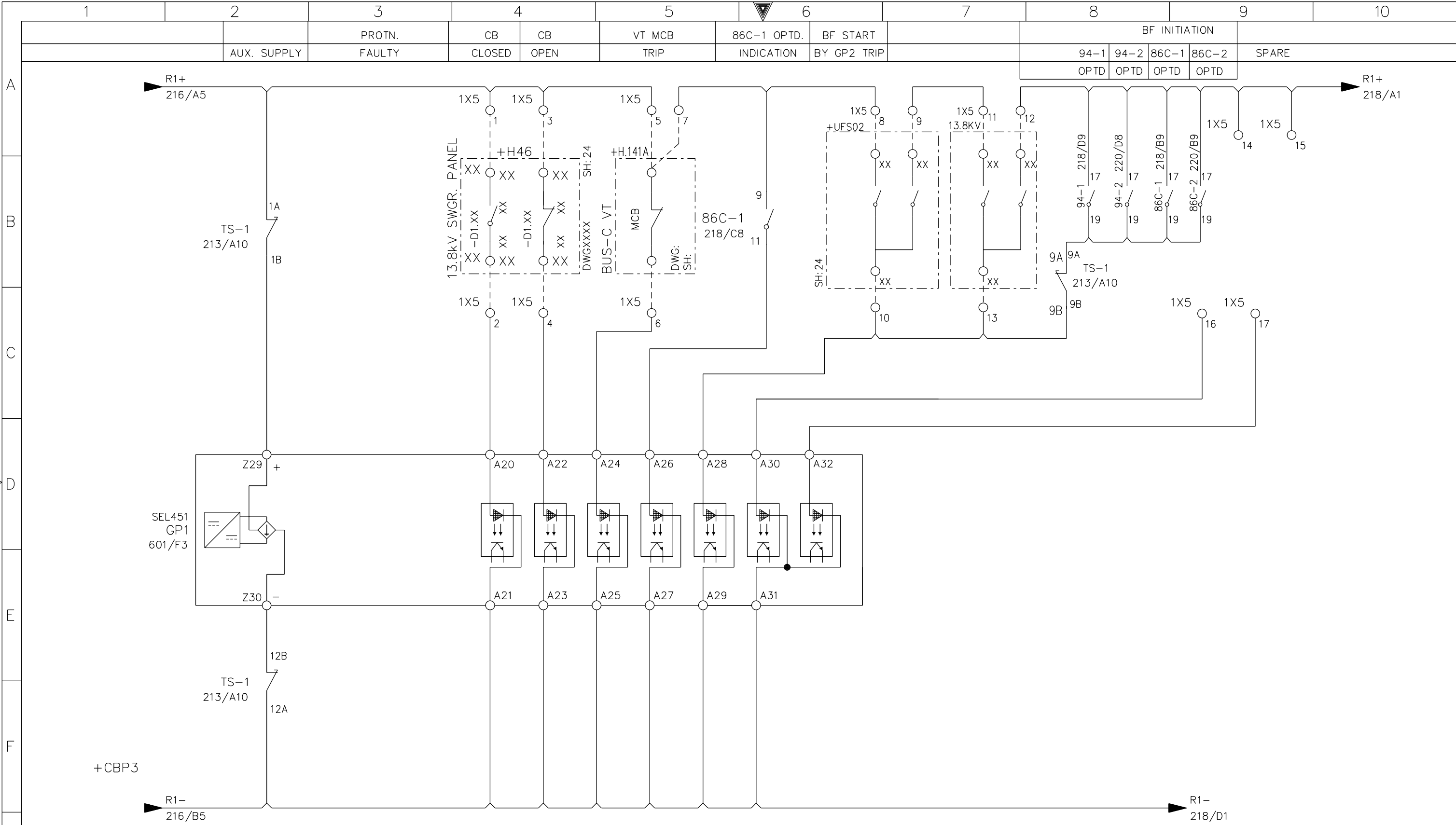
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G	AS-BUILT BY _____ DATE _____		CONTRACT NO. 11131113/00		JOB ORDER NO. S-13656		CT CIRCUITS-GP2 PROTN		<div>الشركة الوطنية لنقل الكهرباء</div> <div>نقل الكهرباء</div> <div>National Grid sa</div>				
				DRAWN BY <u>RIZ</u> CHECKED BY <u>KVR</u>		13.8kV CAPACITOR BANK-3 PROT. PANEL							
	01	14 08	FACTORY AS BUILT		DATE STARTED <u>24.01.2013</u> DATE COMPLETED _____		S/S 8709-132/13.8KV IN AL-KHARJ CITY						
	00	13 04	FOR APPROVAL		OPRG. DEPT. <u>CTPD</u> ENG. DEPT. <u>AUT-PSAC</u>		RIYADH SAUDI ARABIA						
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DC LOGIC CIRCUITS-GP1 PROTECTION

13.8kV CAPACITOR BANK-3 PROT. PANEL

S/S 8709-132/13.8KV IN AL-KHARJ CITY

RIYADH SAUDI ARABIA

الشركة الوطنية لنقل الكهرباء

نقل الكهرباء

National Grid SA

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FOR APPROVAL

DESCRIPTION

DRAWN BY RIZ

DATE STARTED 24.01.2013

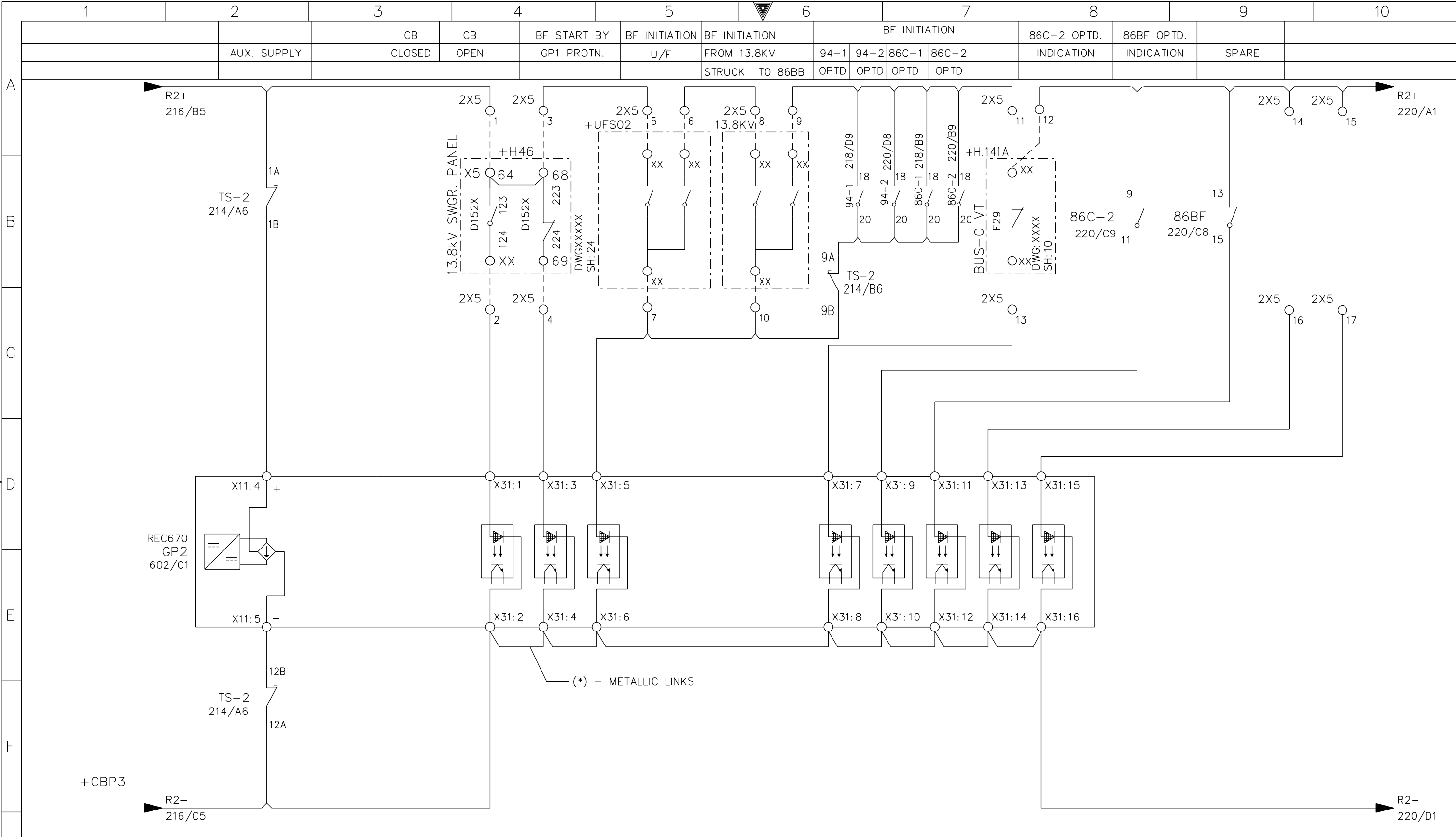
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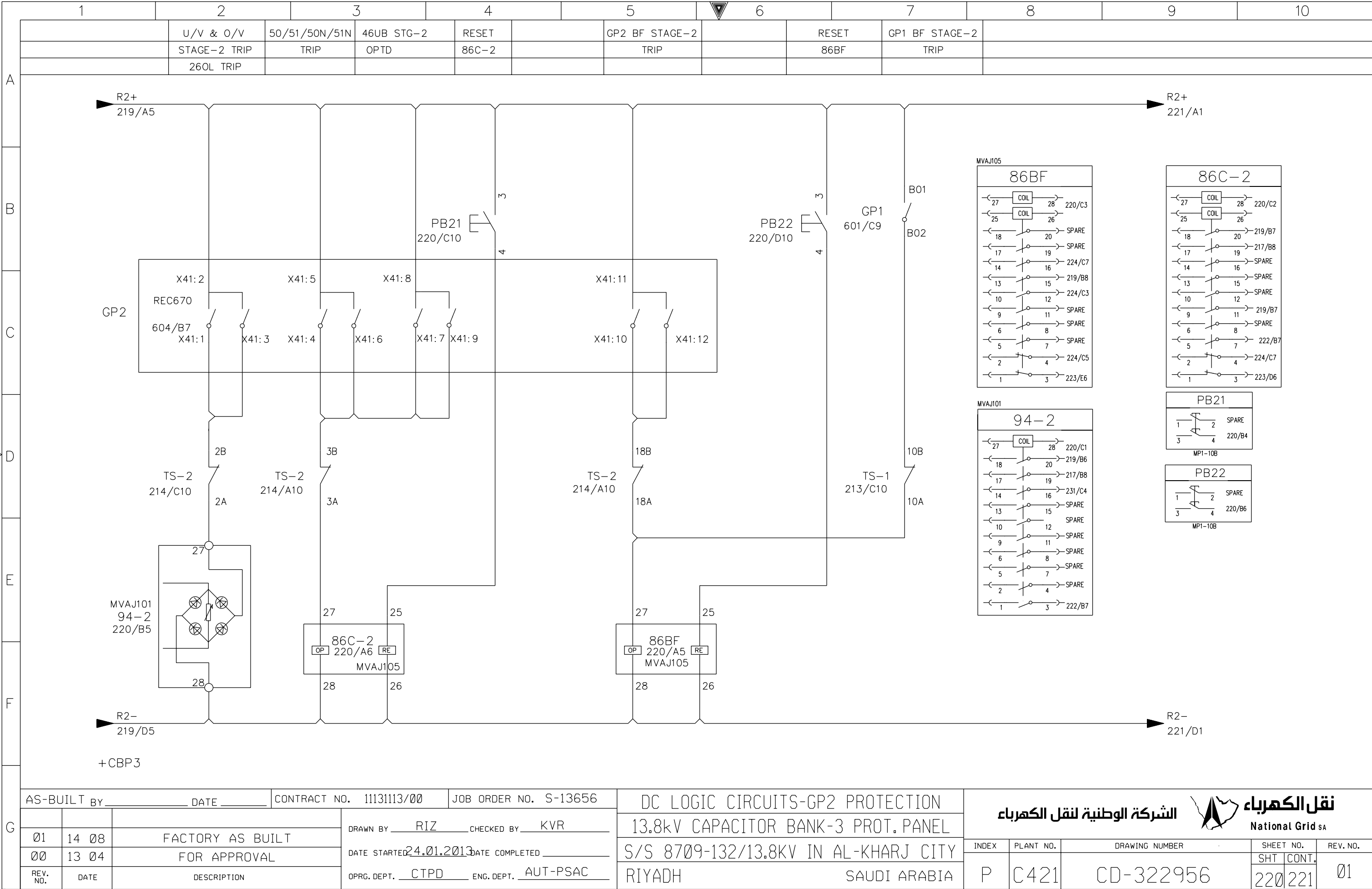
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ENG. DEPT. AUT-PSAC

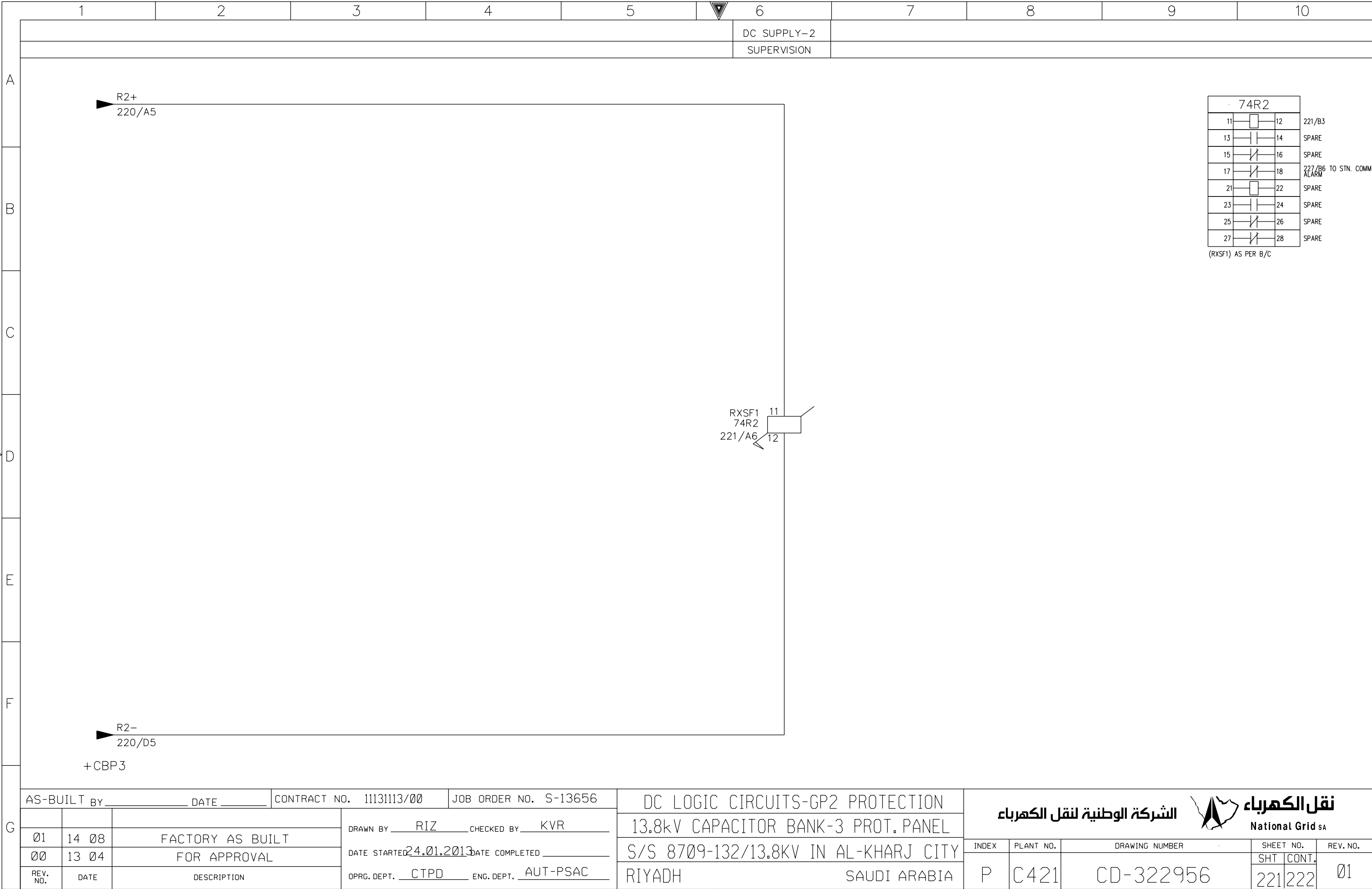




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					DRAWN BY <u>RIZ</u> CHECKED BY <u>KVR</u>		13.8kV CAPACITOR BANK-3 PROT. PANEL								
	01	14 08	FACTORY AS BUILT		DATE STARTED <u>24.01.2013</u> DATE COMPLETED _____		S/S 8709-132/13.8KV IN AL-KHARJ CITY		INDEX	PLANT NO.	DRAWING NUMBER		SHEET NO.		REV. NO.
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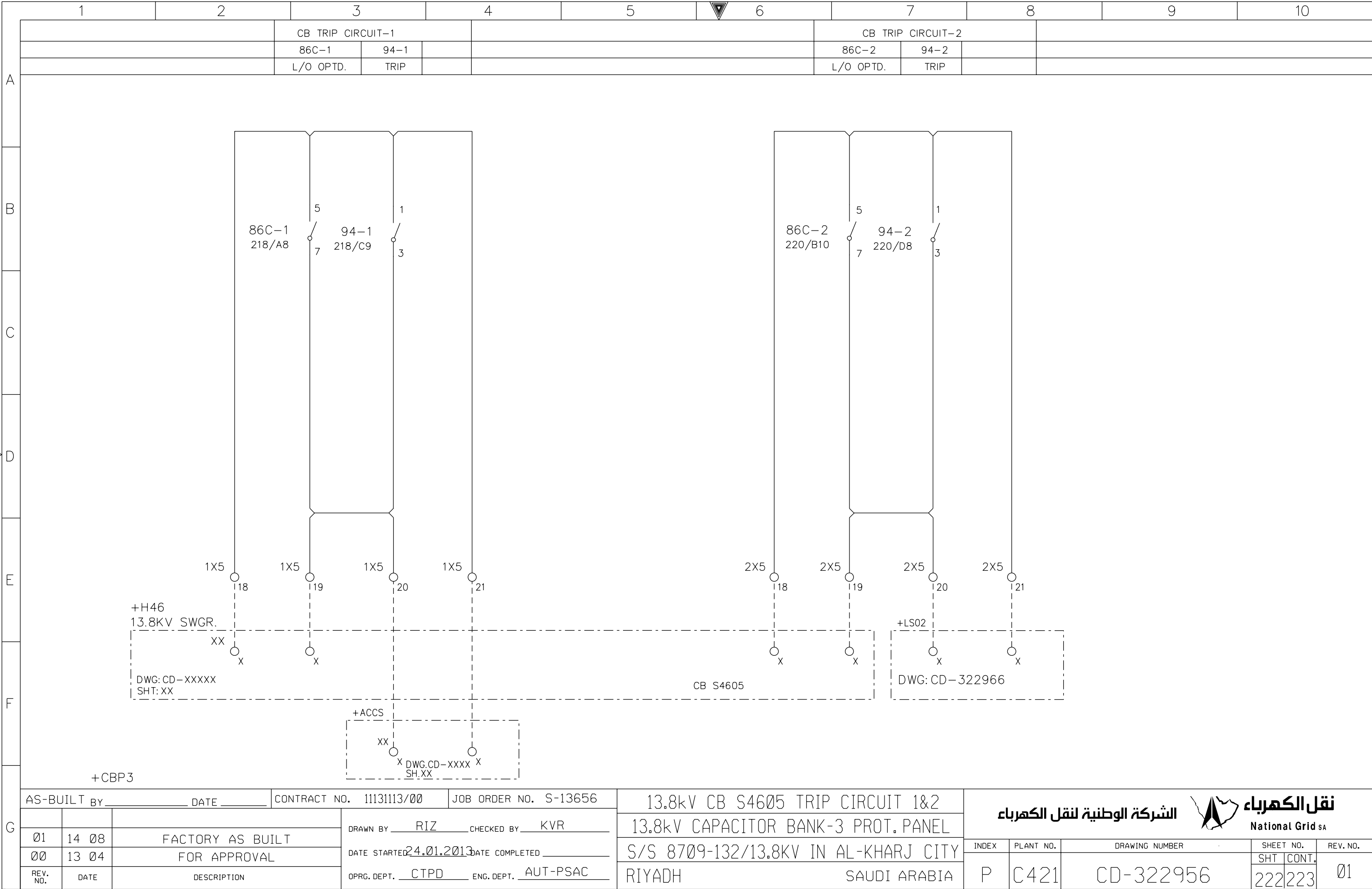
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DMS

VECTOR

NGD200



+CBP3

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DATE

DESCRIPTION

DRAWN BY RIZ

CHECKED BY KVR

DATE STARTED 24.01.2013

DATE COMPLETED

OPRG. DEPT. CTPD

ENG. DEPT. AUT-PSAC

13.8kv CB S4605 TRIP CIRCUIT 1&2

13.8kv CAPACITOR BANK-3 PROT. PANEL

S/S 8709-132/13.8KV IN AL-KHARJ CITY

RIYADH SAUDI ARABIA

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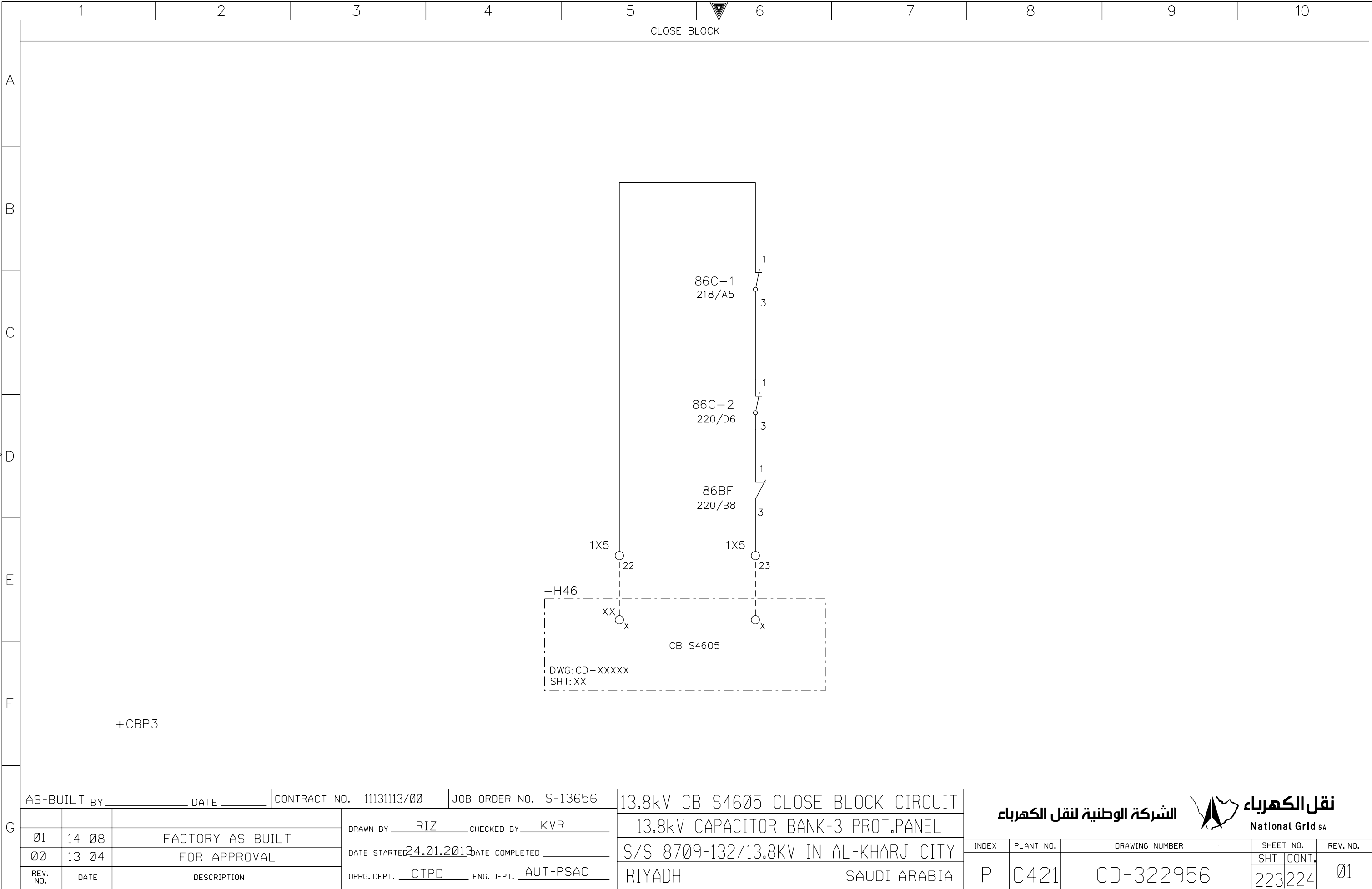
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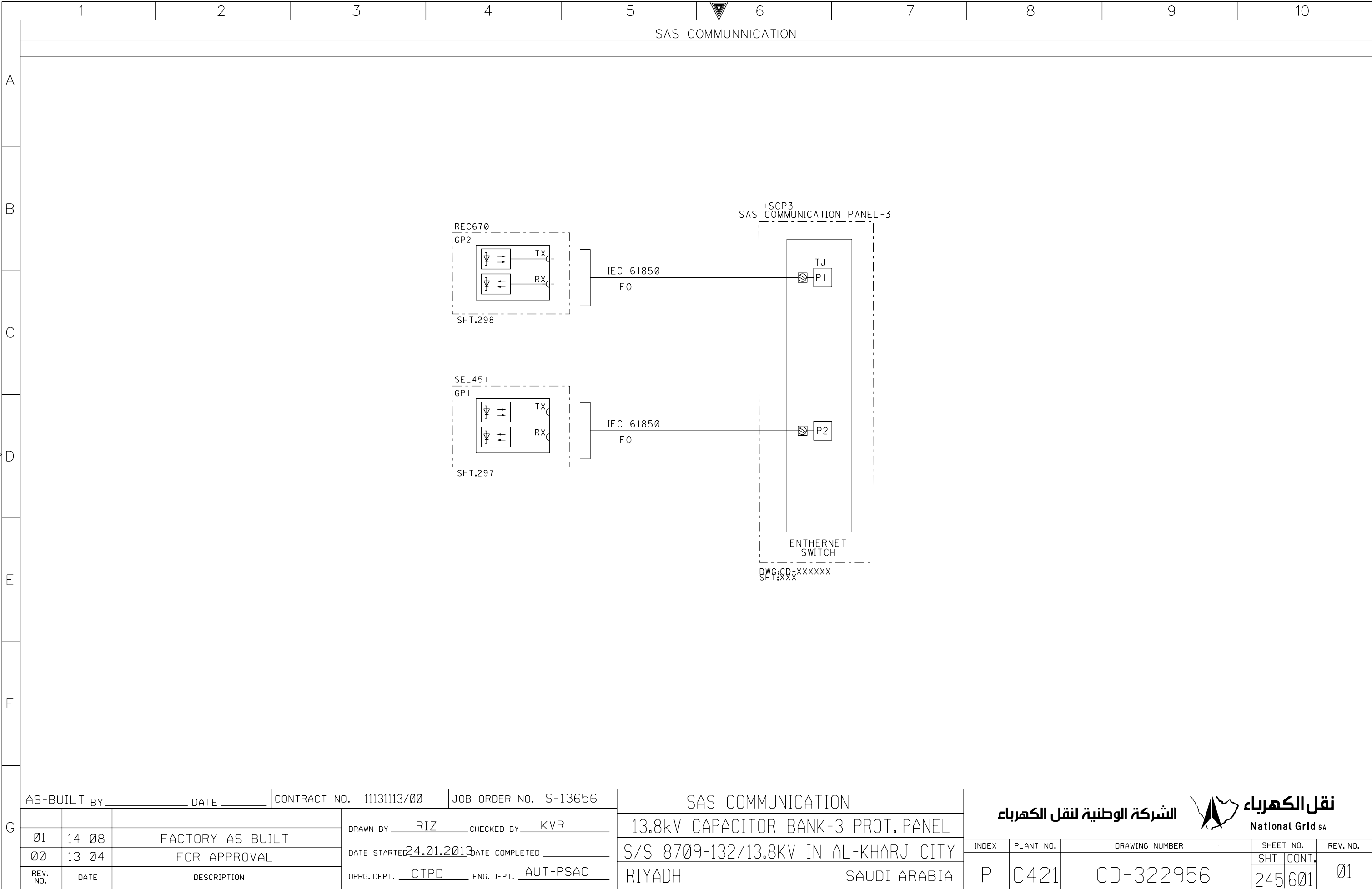
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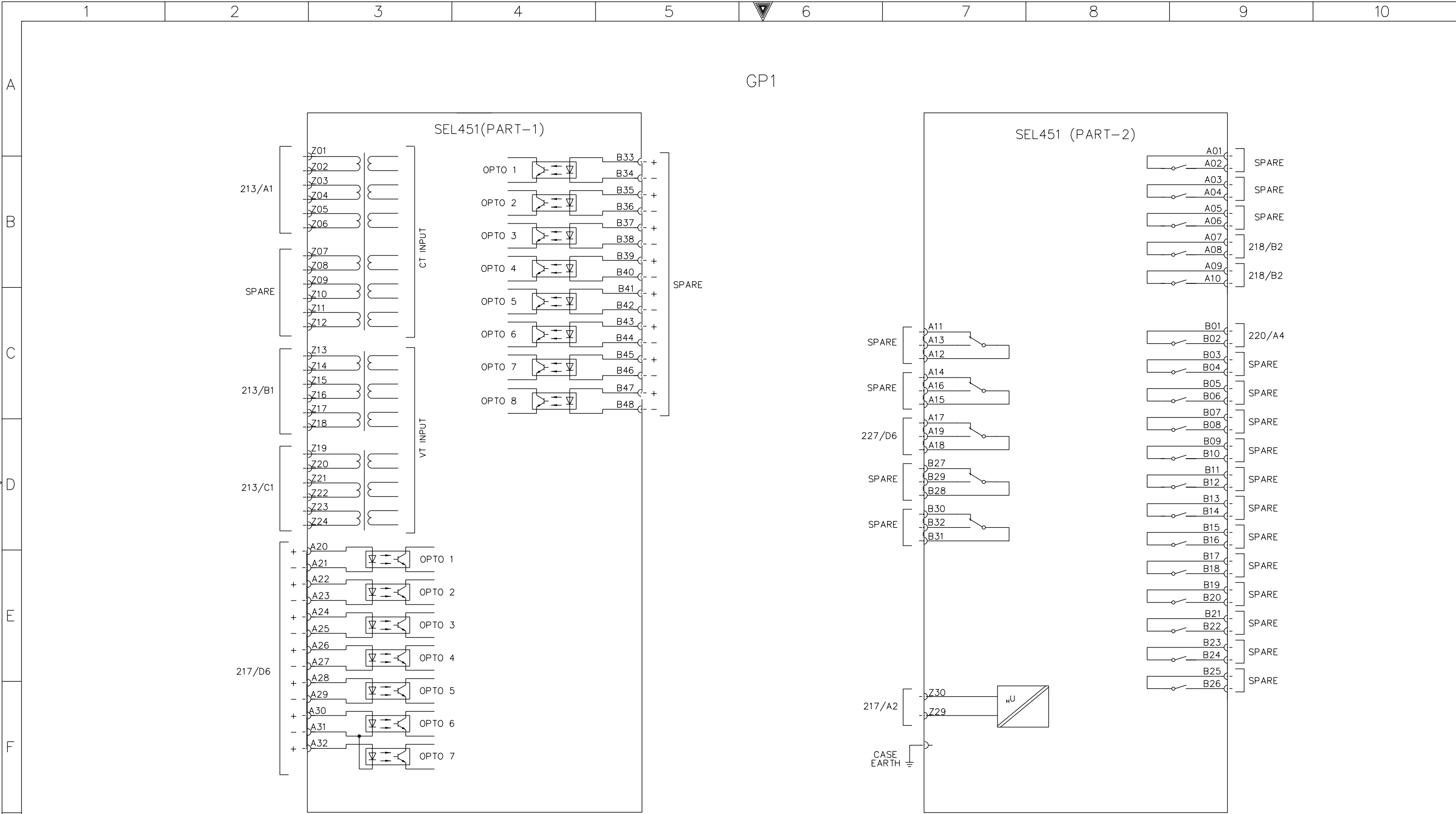
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ENG. DEPT. AUT-PSAC

BLOCK REFERENCE-GP1

13.8kV CAPACITOR BANK-3 PROT. PANEL

S/S 8709-132/13.8KV IN AL-KHARJ CITY

RIYADH SAUDI ARABIA

الشركة الوطنية لنقل الكهرباء

نقل الكهرباء

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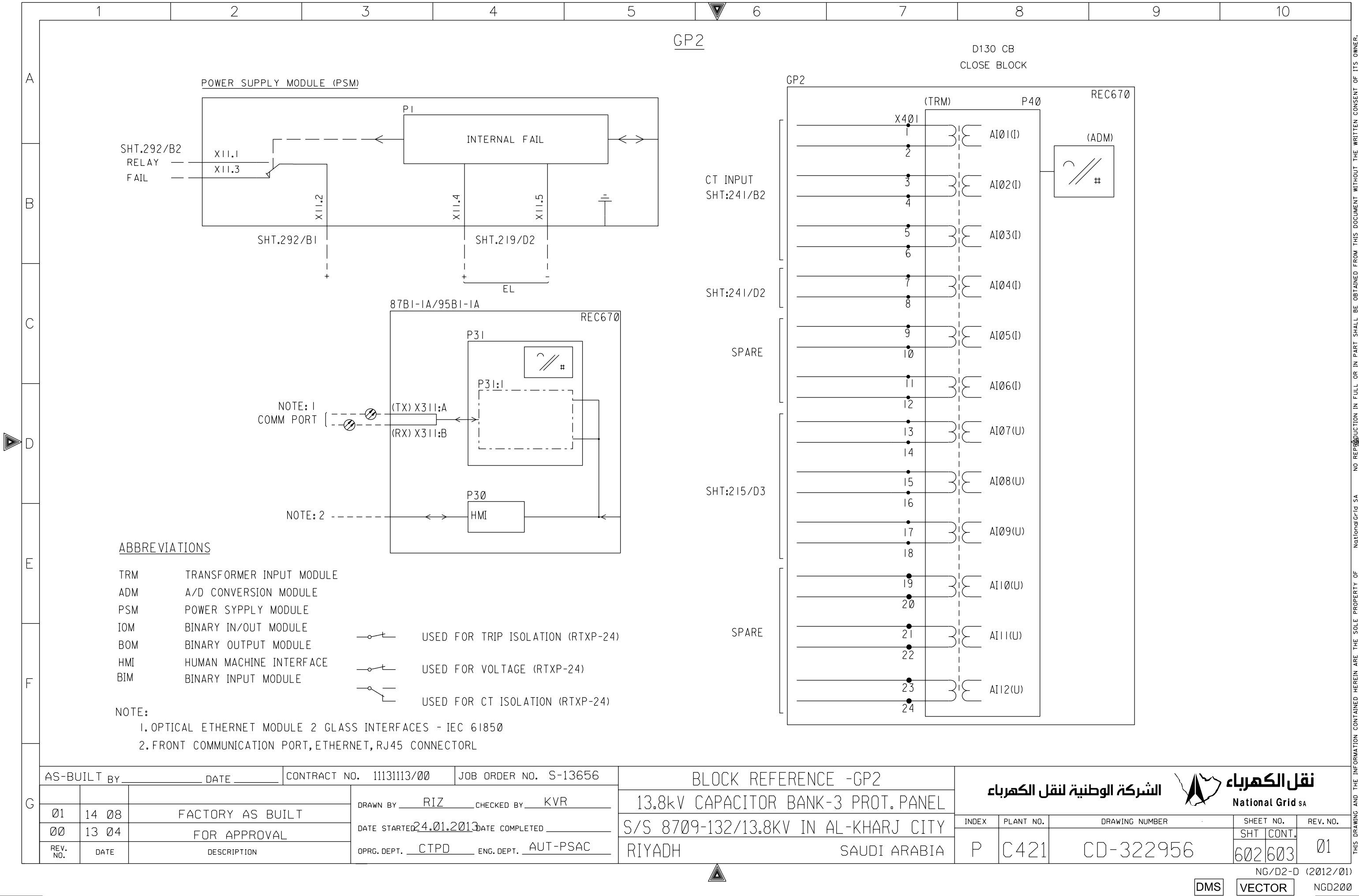
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A	B	INTERNAL REFERENCE		X3 AC CKT.		INTERNAL REFERENCE		1X1 CT CKTS.		INTERNAL REFERENCE		1X2 CT CKTS.		INTERNAL REFERENCE		1X4 DC CKTS.		INTERNAL REFERENCE		1X5 CONTROL & PROTN.		INTERNAL REFERENCE		2X5 CONTROL & PROTN.	
		211/A2		1		213/A7		1		213/D7		1		216/B3		1		217/A4		1		219/A4		1	
		211/A5		2		213/A7		2		213/E7		2		216/B3		2		217/C4		2		219/C4		2	
		211/A2		3		213/B7		3		213/E7		3		216/C3		3		217/A4		3		219/A4		3	
		211/A5		4		213/B7		4		213/E7		4		216/C3		4		217/C4		4		219/C4		4	
		211/A2		5		213/B7		5		213/F7		5		SPARE		5		217/A5		5		219/A5		5	
		211/A5		6		213/B7		6		213/F7		6		SPARE		6		217/C5		6		219/C5		6	
		211/A2		7		213/C7		7		SPARE		7		SPARE		7		217/A5		7		219/A5		7	
		211/A5		8		213/C7		8		SPARE		8		SPARE		8		217/A6		8		219/A6		8	
		SPARE		9		SPARE		9		SPARE		9		SPARE		9		217/A7		9		219/A7		9	
SPARE		10		SPARE		10		SPARE		10		SPARE		10		217/C6		10		219/C6		10			
C	D	INTERNAL REFERENCE		XSH SPACE HEATER		INTERNAL REFERENCE		2X1 CT CKTS.		INTERNAL REFERENCE		1X2 CT CKTS.		INTERNAL REFERENCE		2X4 DC CKTS.		INTERNAL REFERENCE		222/E2		219/A7		219/C6	
		211/C4		1		214/A7		1		215/C7		1		216/D3		1		217/A7		10		219/A7		10	
		211/D4		2		214/B7		2		215/C7		2		216/D3		2		217/A7		11		219/A7		11	
		SPARE		3		214/B7		3		215/D7		3		216/E3		3		217/C7		12		219/C7		12	
						214/B7		4		SPARE		4		SPARE		4		217/A9		13		219/A9		13	
						214/B7		5		SPARE		5		SPARE		5		217/A9		14		219/A9		14	
						214/C7		6		SPARE		6		SPARE		6		217/C9		15		219/C9		15	
						214/C7		7		SPARE		7		SPARE		7		217/A9		16		219/A9		16	
						214/C7		8		SPARE		8		SPARE		8		222/E2		17		219/A9		17	
						214/D7		9		SPARE		9		SPARE		9		222/E3		18		222/E6		18	
E	F	INTERNAL REFERENCE		X61 ALARM CKT		INTERNAL REFERENCE		2X1 CT CKTS.		INTERNAL REFERENCE		X5 CONTROL & PROTN.		INTERNAL REFERENCE		X9 SPARE CKT		INTERNAL REFERENCE		222/E4		219/A7		219/C6	
		216/B3		1		214/A7		1		224/D5		1		231/E3		1		217/A7		19		219/A7		19	
		216/B3		2		214/B7		2		224/D5		2		231/E3		2		217/A7		20		219/A7		20	
		227/E3		3		214/B7		3		SPARE		3		231/E4		3		217/C7		21		219/C7		21	
		227/E4		4		214/B7		4		SPARE		4		231/E4		4		217/A9		22		219/A9		22	
		227/E6		5		214/B7		5		SPARE		5		231/E5		5		217/A9		23		219/A9		23	
		227/E7		6		214/C7		6		SPARE		6		231/E5		6		217/C9		24		219/C9		24	
		SPARE		7		214/C7		7		SPARE		7		231/E6		7		217/A9		25		219/A9		25	
		SPARE		8		214/C7		8		SPARE		8		231/E6		8		222/E2		26		219/A9		26	
		SPARE		9		214/D7		9		SPARE		9		SPARE		9		222/E3		27		219/A9		27	
SPARE		10		214/D7		10		SPARE		10		SPARE		10		222/E4		28		219/A9		28			
G	AS-BUILT BY _____ DATE _____		CONTRACT NO. 11131113/00		JOB ORDER NO. S-13656		TERMINAL BLOCK ALLOCATION		13.8kV CAPACITOR BANK-3 PROT. PANEL		الشركة الوطنية لنقل الكهرباء		National Grid sa		INDEX		PLANT NO.		DRAWING NUMBER		SHEET NO.		REV. NO.		
	01	14 08	FACTORY AS BUILT		DRAWN BY RIZ CHECKED BY KVR		S/S 8709-132/13.8KV IN AL-KHARJ CITY		P		C421		CD-322956		605		NIL		01						
	00	13 04	FOR APPROVAL		DATE STARTED 24.01.2013 DATE COMPLETED _____		RIYADH SAUDI ARABIA																		
	REV. NO.	DATE	DESCRIPTION		OPRG. DEPT. CTPD ENG. DEPT. AUT-PSAC																				

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